

*RETURN TO FMF - LOCATION 7540

PRE-EDIT

QUERY CONTROL FORM			RTIS USE ONLY	
Application No. <u>10 029 221</u>	Prepared by <u>AMW</u>	Tracking Number <u>X</u>		
Examiner-GAU <u>H. T. PARK</u>	Date <u>5-21-84</u>	Week Date <u>X</u>		
- <u>1648</u>	No. of queries <u>2161</u>			

JACKET			
a. Serial No.	f. Foreign Priority	k. Print Claim(s)	p. PTO-1449
b. Applicant(s)	g. Disclaimer	l. Print Fig.	q. PTOL-85b
<input checked="" type="checkbox"/> c. Continuing Data	h. Microfiche Appendix	m. Searched Column	r. Abstract
d. PCT	i. Title	n. PTO-270/328	s. Sheets/Figs
e. Domestic Priority	j. Claims Allowed	o. PTO-892	t. Other

SPECIFICATION	MESSAGE
a. Page Missing	<u>① ILLEGIBLE TEXT in table on page 141: Please supply a replacement page 141.</u>
b. Text Continuity	
c. Holes through Data	
d. Other Missing Text	
<input checked="" type="checkbox"/> e. Illegible Text	<u>② CONTINUING DATA on bib sheet matches that on spec. (per Amtt of 04-04-82) page 1, lines 6-28, but the 2 subsequent paragraphs cite additional data not appearing in PALM bib database for this appl. (Please see page 1, line 30 through page 2, line 10.) Please reconcile.</u>
f. Duplicate Text	
g. Brief Description	
h. Sequence Listing	
i. Appendix	
j. Amendments	
k. Other	<u>THANK YOU.</u>
CLAIMS	
a. Claim(s) Missing	
b. Improper Dependency	
c. Duplicate Numbers	
d. Incorrect Numbering	initials <u>AMW</u>
e. Index Disagrees	RESPONSE <u>Replacement page is submitted by the inventor.</u>
f. Punctuation	
g. Amendments	
h. Bracketing	
i. Missing Text	
j. Duplicate Text	
k. Other	initials <u>GJP</u>

Exonucleases

Enzyme Name (exemplary commercial source & other comments)	5'→3' Exonuclease	3'→5' Exonuclease	5'→3' Polymerase	Strand Displacement	Km dNTPs
Vent _R DNA Polymerase ^a	No	Yes	Yes	Yes ^c	60 μM ^c
Deep Vent _R DNA Polymerase ^a	No	Yes	Yes		50 μM ^c
<i>E. coli</i> DNA Polymerase I ^b	Yes	Yes	Yes	No	1–2 μM ^f
Klenow Fragment DNA Polymerase I ^b	No	Yes	Yes	Yes	2 μM ^g
T4 DNA Polymerase ^a	No	Yes	Yes	No	2 μM ^h
T7 DNA Polymerase ^a	No	Yes	Yes	No	18 μM ⁱ
Taq DNA Polymerase ^b	Yes	No	Yes	No	13 μM ^c
Mung Bean Nuclease ^{bk}	No	Yes	Yes		
S1 Nuclease ^{bm}	No	Yes	Yes		
Pfu DNA Polymerase ^b	No	Yes	Yes		
Tli DNA Polymerase ^b	No	Yes	Yes		
rBst DNA Polymerase ^c	Yes	No	Yes		
Pwo DNA Polymerase ^d	No	Yes	Yes		
Exonuclease I ^c	No	Yes			
Exonuclease III ^c	No	Yes			

a. Stratagene

b. Promega

c. Epicenter

d. Roche

e. Kong, H.M., Kucera, R.B., and Jack, W.E., (1993) *J. Biol. Chem.* 268, 1965–1975.

f. McClure, W.R. and Jovin, T.M., (1975) *J. Biol. Chem.* 250, 4073–4080.

g. Polesky A.H., Steitz, T.A., Grindley, N.D.F. and Joyce, C.M., (1990) *J. Biol. Chem.* 265, 14579–14591.

h. Gillin, F.D. and Nossal, N.G., (1975) *Biochem. Biophys. Res. Commun.* 64, 457–464.

i. Patel, S.S., Wong, E. and Johnson, K.A., (1991) *Biochemistry* 30, 511–525.

k. exhibits some double-stranded exonuclease activity from both ends at higher concentrations of enzyme

m. exhibits some double-stranded exonuclease activity at higher concentrations of enzyme